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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,049	07/11/2002	Eberhard Ernst	09100.025	5465
23117	7590	05/03/2004	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			PASTERCZYK, JAMES W	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/089,049	ERNST ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	J. Pasterczyk	1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 March 2002.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/25/02</u>	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

1. The abstract of the disclosure is objected to because the fourth line is completely illegible. Correction is required. See MPEP § 608.01(b).
2. Claims 4 and 11-13 are objected to because of the following informalities: in l. 3 of each correct the spelling from "petene" to --pentene-. Please assure that each claims ends with a period; the latter claims are printed rather faintly. Appropriate correction is required.
3. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, l. 12, to strictly comply with the need for proper antecedent basis applicants may wish to insert --or copolymerization-- after "polymerization".

In claims 3 and 10, "the process . . . comprising two or more metallocenes" is a non sequitur; processes comprise steps, not physical entities.

In claim 7, l. 5, it is not clear what is meant by "based on". In l. 8 the term "obtainable by" makes the claim vague and indefinite; see *Ex parte Tanksley*, 26 USPQ 2d 1384; compare *Atlantic Thermoplastics Co. Inc. v. Faytex Corp.*, 970 F.2d 834, 23 USPQ 2d 1481 (Fed. Cir. 1992) citing *Cochrane v Badische Aniline und Soda Fabrik*, 111 U.S. 293. In l. 9-10 it is not clear what is reacted with the alumoxanes and polyfunctional organic crosslinkers. In l. 21 the first carbon atom should have a 7 as the subscript; otherwise the group couldn't be an alkylaryl group. The last four lines are couched in functional language without sufficient structure to require fulfillment of the parameters recited; see *Ex parte Slob*, 157 USPQ 172 (Bd. Pat. App. & Interf. 1967). A broad range or limitation together with a narrow range or limitation that falls within the

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broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 7 recites the broad recitation 100 kg/hr, and the claim also recites preferred amounts of 50 kg/hr and particularly preferred amounts of 20 kg/hr which is the narrower statement of the range/limitation.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/27224 (hereafter referred to as Andell).

Andell discloses the invention as claimed (p. 10, l. 13-34; examples).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andell as cited above.

The disclosure of Andell has been discussed above.

Andell lacks the preferred metallocenes of the present invention's dependent claims.

However, such metallocenes are conventional in the art.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Andell with a reasonable expectation of obtaining a highly-useful process for producing olefins with the expected benefit of the polymer produced having a more consistent stereochemistry.

8. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO 0 517 183 (hereafter referred to as Covezzi).

Covezzi discloses the invention substantially as claimed (examples 1-3).

Covezzi lacks disclosure that the polymerization process uses metallocene catalysts.

However, use of metallocene catalysts is conventional in the olefin polymerization art.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Covezzi with a reasonable expectation of obtaining a highly-useful olefin polymerization process with the expected benefit of the polymer produced having a greater stereoregularity due to the molecular nature of the catalyst being used as opposed to the less well-known Ziegler-Natta catalysts.

9. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,618,886 (hereafter referred to as Shinozaki).

Shinozaki discloses the invention substantially as claimed (col. 20, l. 15-60; examples; claim 1).

Shinozaki lacks disclosure that the polymerization process uses metallocene catalysts.

However, use of metallocene catalysts is conventional in the olefin polymerization art.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Shinozaki with a reasonable expectation of obtaining a highly-useful olefin polymerization process with the expected benefit of the polymer produced having a greater stereoregularity due to the molecular nature of the catalyst being used as opposed to the less well-known Ziegler-Natta catalysts.

10. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO 0 321 218 (hereafter referred to as Kioka).

Kioka discloses the invention substantially as claimed (p. 3, l. 4-16; examples 1-2).

Kioka lacks disclosure that the polymerization process uses metallocene catalysts. However, use of metallocene catalysts is conventional in the olefin polymerization art.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Kioka with a reasonable expectation of obtaining a highly-useful olefin polymerization process with the expected benefit of the polymer produced having a

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greater stereoregularity due to the molecular nature of the catalyst being used as opposed to the less well-known Ziegler-Natta catalysts.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark L. Bell  
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J. Pasterczyk

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4/30/04